UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Rey 1450

P O Box 1450 Alexandria, Virgima 22313-1450 www.usplo.gov

NOTICE OF ALLOWANCE AND FEE(S) DUE

23413 7590 06/19/2009 CANTOR COLBURN, LLP 20 Church Street 22nd Floor

Hartford, CT 06103

EXAMINER
THOMPSON, CAMIE S
ART UNIT PAPER NUMBER

DATE MAILED: 06/19/2009

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/718 025	11/20/2003	Tomohiro Oshiyama	KOT0085US	8703

TITLE OF INVENTION: ORGANIC ELECTROLUMINESCENT ELEMENT, AND DISPLAY AND ILLUMINATOR

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	09/21/2009

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FIEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE DEE and DURI ICATION DEE (if required). Blocks 1 through 5 should be completed where

maintenance fee notifica	tions.		rders and notification of a) specifying a new corre No	te: A certificate of	mailin	g can only be used for	r domestic maili	ngs of the
CURRINT CORRESPONDENCE ADDRESS (blue: the Block 1 for any change of address) 23413 7590 06/19/2009 CANTOR COLBURN, LLP 20 Church Street 22nd Floor				Note: A certificate of mailing can only be used for domestic mailings of the feet(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment of formed drawing, must be the two two own certificate of mailing or Transmitsion. In bacely certify that this Feet(s) Transmittal is being deposited with the United State Postal to the Mail Stop ISSUE FEET address above, or being facsimal transmitted to the ISPIO (ST) 1272-2885, on the date indicated below the STPIO (ST) 1272-2885.				
								the United t envelope facsimile ow.
Hartford, CT 06	103							sitor's name)
								(Signature)
								(Date)
APPLICATION NO.	ATION NO. FILING DATE		FIRST NAMED INVENTOR		ATTO	ORNEY DOCKET NO.	CONFIRMATIC	N NO.
10/718,025	11/20/2003		Tomohiro Oshiyama			KOT0085US	8793	
			ENT, AND DISPLAY AN				T	
APPLN, TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSU	E FEE	TOTAL FEE(S) DUE	DATE D	
nonprovisional	NO	\$1510	\$300	\$0		\$1810	09/21/2	309
EXAM		ART UNIT	CLASS-SUBCLASS]				
THOMPSON		1794	428-690000 2. For printing on the page 2.					
1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363). Change of correspondence address (or Change of Correspondence Address form FTO/SH22) attached. "Fee Address" indication (or "Fee Address" Indication form FTO/SH47; Rev 03-02 or more recent) attached. Use of a Customer Number is required.			(1) the names of up to or agents OR, alternati (2) the name of a sing registered attorney or 2 registered patent atto	names of up to 3 registered patent attorneys 1. sto RQ, alternatives to RQ, alternatives, when the RQ alternatives, and the same of a single firm (having as a member a 2-red attorney or agents) and the names of up to terred patent autorneys or agents. If no name is 3. on oamle will be printed.				
PLEASE NOTE: Uni recordation as set fort (A) NAME OF ASSIG	less an assignee is ident h in 37 CFR 3.11. Comj GNEE	ified below, no assignee pletion of this form is NC	THE PATENT (print or ty data will appear on the p of a substitute for filing an (B) RESIDENCE: (CIT's printed on the patent):	astent. If an assign assignment. Y and STATE OR 0	COUN	IRY)		
								wermment
Advance Order -	o small entity discount j	permitted)	b. Payment of Fee(s): (Ple A check is enclosed. Payment by credit ca The Director is hereb overpayment, to Dep	rd. Form PTO-203i	is att	ached. required fee(s), any de		t any is form).
	s SMALL ENTITY state	as. See 37 CFR 1.27.	☐ b. Applicant is no lor					
NOTE: The Issue Fee an interest as shown by the	d Publication Fee (if req records of the United Sta	uired) will not be accepte tes Patent and Trademarl	ed from anyone other than k Office.	the applicant; a reg	istered	attorney or agent; or th	ne assignee or oth	er party in
Authorized Signature				Date				_
Typed or printed name			Registration No					
This collection of inform an application. Confiden submitting the complete this form and/or suggesti Box 1450, Alexandria, V Alexandria, Virginia 223	nation is required by 37 C tiality is governed by 35 d application form to the ions for reducing this bu (irginia 22313-1450. DC k13-1450.	CFR 1.311. The informati U.S.C. 122 and 37 CFR USPTO. Time will var- rden, should be sent to the ONOT SEND FEES OR	on is required to obtain or 1.14. This collection is es depending upon the indi the Chief Information Offic COMPLETED FORMS T	retain a benefit by timated to take 12 vidual case. Any c er, U.S. Patent and O THIS ADDRES	the pub minute ommen Trader S. SEN	lic which is to file (and s to complete, including ts on the amount of times mark Office, U.S. Dep D TO: Commissioner	by the USPTO to g gathering, prep me you require to artment of Common for Patents, P.O.	o process) aring, and complete erce, P.O. Box 1450,

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS

P O Box 1450 Alexandra, Virgima 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/718,025	11/20/2003	Tomohiro Oshiyama	KOT0085US	8793	
23413 7	590 06/19/2009		EXAMINER		
CANTOR COLBURN, LLP			THOMPSON, CAMIE S		
20 Church Street			ART UNIT	PAPER NUMBER	
22nd Floor Hartford, CT 0610)3		1794 DATE MAILED: 06/19/200	9	

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 278 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 278 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Notice of Allowability

Application No.	Applicant(s)	1
10/718.025	OSHIYAMA ET AL.	
Examiner	Art Unit	1
Camie S. Thompson	1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address-All claims being allowable, PROSECUTION ON THE MERTIS IS (OR REMAINS) CLOSED in this application. If not included
herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS
NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative
of the Office or upon petition by the applicant. See 37 CFR 133 and MPEP 1308.

- This communication is responsive to Amendment filed 2/26/09.
- The allowed claim(s) is/are 1-35 and 43-51.
- 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - - 1.

 Certified copies of the priority documents have been received.
 - 2. Certified copies of the priority documents have been received in Application No. _____
 - Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
 - * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

- A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
- 5. CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) 🔲 hereto or 2) 🔲 to Paper No./Mail Date _____
 - (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

 DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- 1. Notice of References Cited (PTO-892)
- 2. Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3. Information Disclosure Statements (PTO/SB/08),
- Paper No./Mail Date
- Examiner's Comment Regarding Requirement for Deposit of Biological Material
- 5. Notice of Informal Patent Application
- Interview Summary (PTO-413), Paper No./Mail Date .
- 7. Examiner's Amendment/Comment
- 8. X Examiner's Statement of Reasons for Allowance

Application/Control Number: 10/718,025 Page 2

Art Unit: 1794

REASONS FOR ALLOWANCE

The following is an examiner's statement of reasons for allowance: Applicant claims an
organic electroluminescent element comprising an anode and cathode and a component layer
provided between the anode and cathode wherein the component layer includes a light emission
layer and the component layer contains a compound represented by

 X_1 -(A_1)_n or X_2 -(A_2)_m

with X_1 being represented by formulae (d), (e), (f), (h), (i), (j) or (k) and X_2 being represented by formulae (l), (m) or (o) as defined by the present claims.

Applicant also claims an organic electroluminescent element comprising an anode and
cathode and a component layer provided between the anode and cathode wherein the component
layer includes a light emission layer and the component layer contains a compound represented
by formulae A, H2, H3, H4, I1, I2, I3, J1 or J2

[9966] Formula I2

[0067] Formula I3

Application/Control Number: 10/718,025 Art Unit: 1794

$$(R_{33})_{i}$$

$$R_{11}$$

$$R_{22}$$

$$R_{24}$$

$$R_{24}$$

$$R_{24}$$

$$R_{34}$$

$$R_{34}$$

$$R_{34}$$

$$R_{34}$$

$$R_{34}$$

$$R_{34}$$

$$R_{34}$$

$$R_{34}$$

$$R_{34}$$

3. The closest prior art, Sato et al., U.S. Patent Number 6,893,743, teaches an organic electroluminescent device comprising an anode and a cathode with a light emission layer formed between the anode and cathode wherein the light emission layer comprises a host material represented by

wherein Z_1 is represented by a direct bond, an oxygen atom, a sulfur atom, a divalent aromatic hydrocarbon, an aromatic heterocyclic group which may have a substituent or any one of the following

. Sato fails to teach instant formula 1 when X_1 is formula (d), (e), (f), (g), (h), (i) or (j) as defined by the present claims. Sato fails to teach instant formula 3 when X is formula (l), (m), or (o) as defined by the present claims. Sato fails to teach or suggest an organic electroluminescent element with the component layer comprising a compound represented by formulae A, H2, H3, H4, H1, H2, H3, H4, H1, H3, H4, H4

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Application/Control Number: 10/718,025 Page 8

Art Unit: 1794

CONCLUSION

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Camie S. Thompson whose telephone number is 571-272-1530. The examiner can normally be reached on Monday-Friday 8:00 am - 6:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, D. Lawrence Tarazano can be reached on 571-272-1515. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/D. Lawrence Tarazano/ Supervisory Patent Examiner, Art Unit 1794 Camie S Thompson Examiner Art Unit 1794